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CROSSFLOW THROMBECTOMY CATHETER AND SYSTEM

CROSS REFERENCES TO CO-PENDING APPLICATIONS

None.

BACKGROUND OF THE INVENTION

5 1. Field of the Invention - The present invention relates
to apparatus for use in treatment of the human body. More particularly,
the present invention relates to an elongated device which may be a single
catheter assembly or a multiple component catheter assembly and which is
suitable for use through percutaneous or other access, for endoscopic
10 procedures, or for intraoperative use in either open or limited access
surgical procedures. Still more particularly, the present invention
relates to an elongated device in the form of a waterjet thrombectomy
catheter, hereinafter termed crossflow thrombectomy catheter, for
fragmentation and removal of thrombus or other unwanted material from
15 blood vessels or body cavities that uses high velocity saline (or other
suitable fluid) jets to macerate the thrombus or other unwanted material.
The elongated device bears certain similarities to known waterjet
thrombectomy catheter constructions but differs therefrom in several
material respects, a major distinction being in the provision of means
20 which produce crossflow jets to create a recirculation flow pattern
optimized for clearing a large cross section of mural thrombus or other
similar material, the name crossflow thrombectomy catheter deriving from
this major distinction. Further, the present invention also relates to
a system constituted either by the combination of the elongated device
25 with both pressurized fluid source means and exhaust regulation means or
by the combination of the elongated device with only pressurized fluid
source means.

2. Description of the Prior Art - Waterjet thrombectomy
catheters have been described in which a distal-to-proximal-directed